TOWSON UNIVERSITY

Mark R. Ginsberg, Ph.D.
President

Office of the President
8000 York Road
Towson, MD 21252-0001

March 10, 2026

Sanjay Rai, Ph.D.
Secretary of Higher Education
Maryland Higher Education Commission
217 E. Redwood Street
Baltimore, MD 21202

Dear Dr. Rai:

In accordance with the Code of Maryland Regulation (COMAR) 13B.02.03.06, Towson University seeks your review and approval to offer the following six new undergraduate degrees, effective fall 2026:

- Bachelor of Science in Business Analytics
- Bachelor of Science in Business Economics
- Bachelor of Science in Finance
- Bachelor of Science in Financial Planning
- Bachelor of Science in Marketing
- Bachelor of Science in Project Management

All the coursework that will comprise the six new proposed undergraduate degree programs is currently offered through TU's Business Administration major (HEGIS code 0506.01; CIP code 52.0201) as either a concentration or specialization within that degree program. TU proposes to elevate these six concentrations/specializations into standalone baccalaureate degree programs. The elevation of these existing concentrations/specializations, which already effectively operate as standalone degree programs in everything but name, will involve no change to curriculum, faculty, or program administration: These programs will be implemented using existing resources under Education Article § 11-206.1. Establishing these six concentrations/specializations as standalone degree programs reflects current industry standards and responds to consistent student demand for greater program clarity and degree recognition, thereby improving our graduates' marketability.

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If you have any questions or require additional information, please contact Rhodri Evans, Assistant Provost for Assessment, Accreditation and Compliance, at rhodrievans@towson.edu or by phone at 410-704-3312.

Thank you in advance for your review.

Sincerely,

Mark R. Ginsberg, Ph.D.
President

MG/rjme

cc: Dr. Candace Caraco, Associate Vice Chancellor for Academic Affairs, USM
Dr. Melanie L. Perreault, Provost and Executive Vice President for Academic Affairs
Dr. Clare N. Muhoro, Vice Provost for Academic Affairs
Dr. Prabakar Kothandaraman, Dean, College of Business and Economics

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Cover Sheet for In-State Institutions
New Program or Substantial Modification to Existing Program

Institution Submitting Proposal	Towson University

Each action below requires a separate proposal and cover sheet.

- (●) New Academic Program
- ( ) New Area of Concentration
- ( ) New Degree Level Approval
- ( ) New Stand-Alone Certificate
- ( ) Off Campus Program
- ( ) Substantial Change to a Degree Program
- ( ) Substantial Change to an Area of Concentration
- ( ) Substantial Change to a Certificate Program
- ( ) Cooperative Degree Program
- ( ) Offer Program at Regional Higher Education Center

Payment Submitted: (●) Yes ( ) No | Payment Type: ( ) R*STARS # JC179188 ( ) Check # | Payment Amount: $850 | Date Submitted: 03/16/26

Department Proposing Program	Business Analytics & Technology Management
Degree Level and Degree Type	Bachelor of Science
Title of Proposed Program	Business Analytics
Total Number of Credits	120
Suggested Codes	HEGIS: 0503.01 CIP: 30.7102
Program Modality	(●) On-campus ( ) Distance Education (fully online) ( ) Both
Program Resources	(●) Using Existing Resources ( ) Requiring New Resources
Projected Implementation Date (must be 60 days from proposal submisison as per COMAR 13B.02.03.03)	(●) Fall ( ) Spring ( ) Summer Year: 2026
Provide Link to Most Recent Academic Catalog	URL: https://catalog.towson.edu/undergraduate/
Preferred Contact for this Proposal	Name: Rhodri Evans Title: Assistant Provost for Assessment, Accreditation & Compliance Phone: 410-704 3312 Email: rhodrievans@towson.edu
President/Chief Executive	Type Name: Mark R. Ginsberg, Ph.D. Signature: [signature] Date: 3/11/2026
	Date of Approval/Endorsement by Governing Board:

Revised 4/2025

College of Business and Economics
Department of Business Analytics & Technology Management
Proposal for Bachelor of Science in Business Analytics

Table of Contents

A. Centrality to Institutional Mission and Planning Priorities.

A.1 Program description and relation to TU mission.

Towson University (TU) proposes the elevation of the existing specialization in Business Analytics within the Bachelor of Science (BS) in Business Administration into a stand-alone Bachelor of Science in Business Analytics. This change involves no new curriculum, no new courses, no new faculty, and requires no additional resources. The program will continue to be administered by the Department of Business Analytics & Technology Management within the College of Business and Economics (CBE) and will remain fully within the scope of accreditation by the Association to Advance Collegiate Schools of Business International (AACSB).

The purpose of business analytics is to collect, organize and analyze business data and derive business intelligence and insights to help businesses function optimally, improve processes, change policies, and introduce new technologies. Mirroring the structure of majors at other AACSB-accredited business schools, the existing specialization requires a foundation in cross-disciplinary business courses (including a Microsoft Excel based course and a cross-disciplinary business analytics course) and 21 credits focused on business analytics.

Because AACSB classifies programs by discipline, treating majors, concentrations, and specializations as equivalent,[1] the change will have no effect on current accreditation. However, it will benefit students by providing them with a clearer, more marketable credential aligned with industry expectations. Major status is desired by TU students because the discipline of business analytics will be reflected on their diplomas. The proposed change improves alignment with the search practices of employers and applicant tracking systems that rely on degree titles, thereby enhancing students' competitiveness for internships and full-time positions. Classification as a major will also provide transparency in data availability and increase accuracy in tracking programs.

Furthermore, the change is aligned with the mission of TU. Through a foundation in the liberal arts and a commitment to academic excellence, interdisciplinary study, research and public service, Towson University prepares students for careers in high demand today and in the future. Business economics capabilities— including the knowledge and tools to gather, clean, model, and interpret data to support organizational decision-making—are core to Maryland's economy and essential skills for student career success.

A.2 Alignment with TU's strategic goals and priorities.

The elevation of the specialization in Business Analytics to a stand-alone Bachelor of Science in Business Analytics directly advances TU's six institutional priorities: Educate, Innovate, Engage, Include, Support, and Sustain.

[1] See https://www.aacsb.edu/-/media/documents/accreditation/2020-interpretive-guidance-july-2021.pdf wherein "majors or other areas where intellectual capital would be expected to be maintained, including concentrations and specialties" are held to identical standards (e.g., p. 10).

Educate: Business analytics is a high-demand field aligned with state and regional workforce needs. Students graduate with strong analytical and problem-solving skills, industry-relevant software experience, and professional certification in Microsoft Excel—preparing them for immediate career success.
Innovate: The curriculum is continuously updated to reflect emerging technologies used across industry, including Python, R, Tableau, Power BI, and AI-enabled tools. This contributes to TU's broader commitment to fostering innovation and digital fluency across disciplines.
Engage & Include: Courses are infused with applied learning opportunities, collaborative problem-solving, and real-world projects. All Business Analytics students complete a professional internship, strengthening connections with employers and expanding access to equitable experiential learning.
Support: Major status enhances the clarity and visibility of a student's course of study, improving employer recognition and supporting stronger outcomes in internships, job placement, and graduate school admissions.
Sustain: The proposed change is fiscally responsible. Because the curriculum, faculty, and administrative structures already exist, the elevation to a major requires no new university resources while improving program visibility and institutional effectiveness.

A.3 Adequate funding for first five years.
TU began offering a specialization in Business Analytics within the Business Administration major in fall 2022. Since then, it has become the college's fastest growing area of study, with 131 students in fall 2025. The proposed change to a stand-alone major will effectively be a change in name only, will require no new resources, and will continue to be adequately funded.

A.4 Institutional commitment.
TU is committed to continuing to provide the administrative, financial, and technical support required to support the program. The program will continue to be housed in the Department of Business Analytics & Technology Management within the College of Business and Economics. No new administrative, financial, or technical support is required.

The existing specialization in Business Analytics within the BS in Business Administration would be converted to a BS in Business Analytics. All students currently enrolled in the specialization would have the option of switching to the BS in Business Analytics or completing the specialization within Business Administration for a period of four years. The vast majority will choose to switch. As the program structure and course offerings will remain the same, no additional accommodations will be necessary.

TU is committed to student success and will provide all enrolled students with the necessary courses and resources (such as advisors to guide students through the program and technical support from the Office of Technology Services) so they can graduate on schedule.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan.

B.1 Demonstrated demand and need.

Business analytics is a critical workforce need in Maryland and nationally. Organizations across finance, healthcare, government, cybersecurity, transportation, and logistics increasingly rely on data-driven decision-making. The stand-alone degree supports statewide workforce development, therefore addressing a societal need, by producing graduates with skills in data visualization, business intelligence, data warehousing, and predictive modeling.

The program will expand access to high-demand analytics careers for Maryland students, particularly first-generation and transfer students. Because no curriculum changes are required, the program maintains affordability and accessibility while enhancing degree clarity.

B.2 Consistency with the Maryland State Plan for Postsecondary Education.

Elevating the program to a stand-alone major will directly support the Maryland State Plan for Postsecondary Education's goal of Student Success by strengthening the quality, clarity, and market relevance of academic pathways that prepare students for high-demand careers. It will reinforce **Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland** by providing students with 1) a more accurate disciplinary identity; 2) improved advising clarity; 3) and a credential that aligns with industry expectations and national and state norms. The change also advances **Priority 7: Enhance the ways postsecondary education is a platform for ongoing lifelong learning** by creating a more transparent structure that better supports students pursuing advanced certifications, graduate study, and professional roles in business analytics. Because the proposal requires no new resources, it embodies the State Plan's emphasis on accessible, high-quality, and future-focused educational offerings that contribute to Maryland's long-term economic vitality.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State.

C.1 Employment opportunities.

Students in the program learn to organize and analyze data, discover patterns, and derive business intelligence and insights to drive better decision making. Graduates of the program are prepared for high-demand roles including data analyst, business intelligence analyst, business analytics consultant, operations analyst, and supply chain analyst. These roles typically require bachelor's-level preparation and are associated with Standard Occupational Classification (SOC) codes such as Management Analyst (13-1111), Operations Research Analysts (15-2031), and other business-focused analyst positions.

Employers routinely filter applicants by degree title, and a stand-alone Business Analytics major aligns with these hiring practices more directly than a specialization listed under Business Administration.

C.2 Market demand.

According to data from the TU career center, 90% of graduates of the current Business Analytics specialization were employed or seeking further education six months after

graduation. The average entry-level salary was $54,052. Employers included ARGO Systems, AssuredPartners, BoozAllen Hamilton, Essential Support Services, the Whiting-Turner Contracting Company, and the U.S. Nuclear Regulatory Commission.

C.3 Expected vacancies over the next five years.

According to the Bureau of Labor Statistics Occupational Outlook Handbook, the job outlook for Management Analysts with a bachelor's degree is growing much faster than average (9%), with a median pay of $101,190.[2] The demand for Operations Research Analysts with a bachelor's degree is growing much faster than average (21%), with a 2024 median salary of $91,290.[3]

According to the Maryland Department of Labor,[4] the demand in Maryland is likely to grow faster than average, at 10.41% for Management Analysts and 23.18% for Operational Analysts. The Department projects 24,024 job openings in Maryland for Management Analysts and another 3,650 openings for Operations Analysts by 2034.

C.4 Projected supply of prospective graduates.

The conversion of the program to a stand-alone major will benefit the current population of TU students, as well as the population of transfer students who choose TU. As of fall 2025, there were 131 students enrolled in the Business Analytics specialization. Table C1 shows the number of incoming first-time and transfer students who either declared Business Analytics as their specialization or who did not initially declare a concentration/specialization over the past five years. Table C2 shows the number of students transferring into the TU College of Business and Economics from community colleges in Maryland over the past five years.

Table C1: Enrollment in Potential Feeder Programs (Incoming First-time and Incoming Transfer students, Towson University)

Institution	Program Name	Fall 2021	Fall 2022	Fall 2023	Fall 2024	Fall 2025
Towson University	Business Administration -- undeclared	165	136	136	106	107
Towson University	Business Administration, Specialization in Business Analytics	16	2	27	30	52

Source: Towson University Institutional Research[5]

Table C2: Enrollment in Potential Feeder Programs (Number of Students Transferring into TU)

Community College	Fall 2020	Fall 2021	Fall 2022	Fall 2023	Fall 2024	Fall 2025
Allegany College of Maryland	1	1	0	0	0	0
Anne Arundel Community College	35	36	30	24	29	18
Baltimore City Community College	1	5	6	2	3	2
Carroll Community College	13	9	10	14	11	12

[2] https://www.bls.gov/ooh/business-and-financial/management-analysts.htm
[3] https://www.bls.gov/ooh/math/operations-research-analysts.htm
[4] https://labor.maryland.gov/lmi/iandoproj/occupationalprojections.xlsx
[5] https://wp.towson.edu/institutionalresearch/academic-plans/

Community College	Fall 2020	Fall 2021	Fall 2022	Fall 2023	Fall 2024	Fall 2025
Cecil Community College	2	5	4	2	1	3
Chesapeake College	1	4	4	1	1	3
College of Southern Maryland	7	3	10	10	3	10
Community College of Baltimore County	51	68	61	46	53	46
Frederick Community College	16	16	9	10	9	11
Hagerstown Community College	5	4	4	1	3	3
Harford Community College	44	49	42	32	26	26
Howard Community College	28	33	38	16	20	18
Montgomery College	37	41	27	22	21	22
Prince Georges Community College	4	14	9	7	7	12
Wor Wic Community College	2	1	1	0	1	1

Source: Towson University Institutional Research[6]

D. Reasonableness of Program Duplication.

D.1 Program duplication.

No Maryland AACSB-accredited business school offers a stand-alone Bachelor of Science in Business Analytics with the same disciplinary focus. The University of Maryland, College Park offers a BS in Operations Management and Business Analytics, but with fewer analytics credits (18 vs. TU's 21). Loyola University offers an Information Systems and Data Analytics major within its School of Business and Management that blends analytics with information systems and programming. TU's Business Analytics major is more specialized and data-focused, emphasizing data mining, modeling, visualization, and applied analytics. Other analytics programs in the state are housed outside AACSB-accredited business colleges.

TU's program fills a statewide gap by offering a business-focused analytics major within an AACSB-accredited college. Minimal impact on other institutions is expected because TU already offers the specialization and the change does not add capacity or modify curriculum.

Table D1: Degrees Awarded in Business Analytics and Related Majors at TU and Other Maryland Institutions

Business Analytics Programs	Fall 2021	Fall 2022	Fall 2023	Fall 2024
Towson University's Business Analytics Specialization	0	0	0	17
University of Maryland College Park's Operations Management and Data Analytics Major	75	67	70	65
Loyola University's Information Systems and Data Analytics Major	0	0	2	17

Sources: MHEC Academic Program Inventory;[7] Maryland Higher Education Commission Trends in Degrees and Awards by Program 2024,[8] TU Internal Records

[6] https://wp.towson.edu/institutionalresearch/transfer-students/

[7] https://mhec.maryland.gov/institutions_training/Pages/searchmajor.aspx

[8] https://mhec.maryland.gov/publications/Documents/Research/TRENDS%20IN%20DEGREES%20AND%20AWARDS%20BY%20PROGRAM%202024%20-%20External.pdf

D.2 Justification for the proposed program.
The basic structure of the current specialization, with a foundation in cross-disciplinary courses in business and 21 credits focused in business analytics, is similar to the structure of majors in business analytics at other AACSB-accredited business schools (see Appendix A). The current specialization in Business Analytics offered at TU is equivalent to a major in all but name. Major status is desired by TU students because the discipline of business analytics will be reflected on their diplomas, and they deserve the same access as students at other universities. Classification as a major will also provide transparency in data availability and increase accuracy in tracking programs.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs).
The conversion of TU's existing Business Analytics specialization to a stand-alone major, which involves no curricular changes and requires no additional resources, should have minimal impact on high-demand programs at Maryland's HBIs. No Maryland HBI currently offers a stand-alone major in Business Analytics.

F. Relevance to the identity of Historically Black Institutions (HBIs).
The conversion of TU's existing Business Analytics specialization to a stand-alone major, which involves no curricular changes and requires no additional resources, should have minimal impact on the uniqueness and institutional identities and missions of Maryland's HBIs.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes.
G.1 Oversight of the program.
The curriculum that will constitute the new stand-alone major is already established; no resources are required to develop the degree program as all the coursework and faculty needed to teach it are already in place.

The specialization in Business Analytics was created in 2022 in response to growing demand in the field. It has grown rapidly, from an initial seven students in fall 2022 to 131 in fall 2025. The program meets rigorous standards of faculty qualification consistent with AACSB guidelines of greater than 60% of student credit hours in the discipline taught by full time faculty and greater than 90% taught by faculty with at least a master's degree. In academic year 2025-2026, 73% of courses required within the Business Analytics specialization were taught by full-time faculty, and 100% had earned an advanced degree.

Faculty teaching in the program and their credentials are listed in Table I1.

G.2 Educational objectives and learning outcomes.
Program learning goals are appropriate and aligned with both TU's broad institutional student learning outcomes (ISLOs) and AACSB guidance.

Table G1: Alignment of Program Learning Goals with TU Goals

Program Learning Goal	Aligned TU ISLO
Apply Business Analytics Knowledge in the Context of Professional Employment	Specialized Knowledge in Defined Fields
Communicate Properly and Effectively	Effective Communication
Apply Critical Thinking and Problem-Solving Skills to Organizational Decision Making	Critical Analysis and Reasoning
Use Technology Effectively in Business Settings	Information Literacy and Technological Competency
Work Effectively Toward Achieving Common Goals within Diverse Teams	Working in Multifaceted Work Environments
Distinguish Between Ethical and Unethical Conduct in their Professional Lives	Local and Global Citizenship and Leadership

G.3 Assessment and documentation of student learning outcomes.

Faculty involvement and collaboration in the assurance of learning process was commended by the peer review team during our more recent AACSB review in 2023. Moreover, the Department of Business Analytics & Technology Management remains committed to maintaining a mature, responsive assessment process. All learning objectives are measured by at least one faculty-created direct measure infused into a course, as well as indirect assessments from students and employers. Cross-disciplinary faculty on a college Assessment Committee ensure that results and opportunities for improvement are communicated to their home departments, other relevant committees, and CBE leadership.

G.4 Program requirements.

As is typical in AACSB-accredited universities, the program requires a standard set of cross-disciplinary business courses as well as focused instruction within the specific discipline (i.e., major/concentration/specialization, which are treated identically by AACSB). A listing of required courses is given in Table G2. See Appendices A and B for the course descriptions for the required courses in the major and a sample four-year program completion plan.

The 21-credit disciplinary depth is substantial relative to other AACSB-accredited undergraduate business analytics programs (see Appendix C) and does not include additional analytics and technology courses in TU's business foundations.

Table G2: Program Requirements

Course Number	Course Title	Credit Weighting
Foundation Courses Required for Admission to Major (18 credits)		
ACCT 201*	Principles of Financial Accounting	3
ECON 201*	Microeconomic Principles	3
ECON 202*	Macroeconomic Principles	3
LEGL 225*	Legal Environment of Business	3
ECON 205 or MATH 231*	Statistics for Business and Economics I or Statistics	3
MATH 211*	Applied Calculus	3

Course Number	Course Title	Credit Weighting
Foundational Courses in Business (32 credits)		
ACCT 202*	Managerial Accounting	3
BUSX 301	Business Communications	3
EBTM 250	Problem Solving in Business I	1
EBTM 251	Problem Solving in Business II	1
EBTM 337	Enterprise Information Systems	3
FIN 331	Principles of Financial Management	3
MKTG 341	Marketing and Creativity	3
MNGT 361	Leadership and Management	3
EBTM 350	Business Analytics	3
EBTM 365	Principles of Operations Management	3
MNGT 481	Strategic Management	3
BUSX 460	Professional Experience	3
Business Analytics Requirements (21 credits)		
EBTM 320	Data Visualization and Dashboards	3
EBTM 400	Applied Data Analytics	3
EBTM 446	Business Intelligence	3
EBTM 455	Business Data Warehousing	3
EBTM 456	Business Decision Modeling	3
EBTM 457	Data Mining for Business Analytics	3
Select One from the Following		
EBTM 310	Introduction to ERP Systems	3
EBTM 343	Introduction to Project Management	3
EBTM 419	Supply-Chain Management	3
EBTM 422	CRM Analytics	3
EBTM 454	Business Process Management	3
Total Credits in Major		**71**
Additional Core Curriculum/Elective Credits Required to Complete Degree		**49**
Total Credits for BS Degree		**120**

*May be transferred from a community college

G.5 General education requirements.

TU's Core Curriculum, comprising fourteen categories within four themes (43-46 credits in total), satisfies the general education requirements mandated by the State of Maryland (COMAR 13B.06.01.03) and educational effectiveness standards held by the university's accrediting body, the Middle States Commission on Higher Education. To fulfill TU's Core Curriculum requirements, students must complete one course from each of the following categories (1-14).

Table G3: TU Core Curriculum Requirements

Core Category	Credits
Fundamentals	
(1) Towson Seminar (Must be completed with a minimum C grade; course not required for transfer students)	3
(2) English Composition (Must be completed with a minimum C grade)	3
(3) Mathematics	3-4
(4) Creativity & Creative Development*	3

Core Category	Credits
Ways of Knowing	
(5) Arts and Humanities*	3
(6) Social & Behavioral Sciences	3
(7) & (8) Biological & Physical Sciences	7-8
Writing in a Chosen Field	
(9) Advanced Writing Seminar (Must be completed with a minimum C grade)	3-4
Perspectives	
(10) Metropolitan Perspectives	3
(11) The United States as a Nation	3
(12) Global Perspectives	3
(13) Diversity & Difference	3
(14) Ethical Issues & Perspectives	3
Total Credits	**43-46**

*Courses fulfilling Core 4 and Core 5 requirements must be from different subjects.
ECON 205 or MATH 231 (Core 3), ECON 201 or ECON 202 (Core 6), BUSX 301 (Core 9), and LEGL 225 (Core 11) fulfill both TU Core Curriculum and major requirements.

G.6 Specialized accreditation requirements.
Converting the current specialization in Business Analytics into a stand-alone major will not affect the program's accreditation status; it will remain fully within the scope of AACSB accreditation.

G.7 Outside contracts.
Not applicable.

G.8 Program assurances.
Curriculum, course, and degree requirements are updated and published annually in TU's academic catalog. The Department of Business Analytics & Technology Management's website provides links to detailed information about degree requirements as well as information that will help students be successful in the program, such as advising resources, scholarships, and internship opportunities. TU's website offers extensive information about student support services, financial aid, and tuition costs each year.

The College of Business and Economics has a dedicated Student Academic and Career Services unit with professional advisors trained on the Business Analytics curriculum. All TU undergraduate students are required to meet with an academic advisor each semester. In the first meeting with an advisee after the student reaches 45 credits, the academic advisor helps the student develop a Four-Year Degree Completion Plan, according to the academic requirements for the major. During subsequent advising meetings, the advisor reviews the student's progress towards their degree and helps the student plan courses for the next semester. The advisor may help the student modify the degree completion plan, if necessary. A dedicated career advisor within CBE works with the TU Career Center to provide advice to students and help with the search for an internship and a post-graduation job. All students in

the Business Analytics program will be required to complete a professional internship as part of the BUSX 460: Professional Experience course.

Students in the program have the same opportunities for scholarships as students across the College of Business and Economics.

G.9 Assurances of advertising, recruiting, and admissions materials.
TU regularly reviews its advertising, recruiting, and admissions materials to ensure that they clearly and accurately represent programs and services available, and that there is consistency across different modes of communication such as the TU website, the academic catalog, and other print and online promotional materials.

H. Adequacy of Articulation.

TU has signed an articulation agreement with Cecil College to facilitate transfer into the program (see Appendix D). Additionally, TU maintains statewide ARTSYS-aligned articulation pathways for business programs with all Maryland community colleges. Because the Business Analytics curriculum remains unchanged, all existing pathways will continue to apply directly to the Business Analytics major.

I. Adequacy of Faculty Resources.

I.1. Quality of program faculty.
Faculty in the Department of Business Analytics & Technology Management meet AACSB instructional qualification standards. Current faculty capacity is sufficient to support the stand-alone major. A listing of faculty and courses in the major content area that they regularly teach is given in Table I1.

Table I1: Faculty Resources

Faculty Name	Status (Full-Time, Part-Time, Adjunct)	Highest Degree Earned/ Field of Study/Institution/ Degree Award Date	Title/Rank	Courses Faculty Regularly Teach (Course Number)
Adams, Jessica	Part-time	MS, Applied Math, Johns Hopkins University, 2016	Adjunct Professor	MATH 231
Allan, Shaun	Part-time	MS Mathematics, Towson University, 2017	Adjunct Professor	MATH 211
Azmi Shabestari, Mehrzad	Full-Time	PhD, Accounting, Rutgers University, 2017	Associate Professor	ACCT 201
Berkley, Darrin	Part-time	PhD, Mathematics Education, Morgan State University, 2012	Adjunct Professor	MATH 231
Bitoude, Eric	Part-time	MS Math Education, UMBC, 2014	Adjunct Professor	MATH 211
Bonanno, Francis	Part-Time	MBA, University of Maryland, 2008	Adjunct Professor	BUSX 460
Boro, Irene	Part-Time	PhD, Morgan State University, 2026	Adjunct Professor	FIN 331
Boyd Leon, Chris	Full-Time	PhD, Economics, University of Minnesota, 2022	Assistant Professor	ECON 201
Bracken, Victoria	Part-time	MBA, University of Baltimore/TU, 2018	Adjunct Professor	MATH 231

Faculty Name	Status (Full-Time, Part-Time, Adjunct)	Highest Degree Earned/ Field of Study/Institution/ Degree Award Date	Title/Rank	Courses Faculty Regularly Teach (Course Number)
Brannon, David	Full-time	PhD, Entrepreneurship, Syracuse University, 2011	Professor	MNGT 481
Brown, Dima	Part-Time	DBA, University of Maryland Global Campus, 2023	Adjunct Professor	ACCT 201
Buchoff, Barry	Full-Time	MBA, Loyola University, 1975 (CPA)	Assistant Professor	ACCT 202
Buschman, Cindy	Part-Time	PhD, Supply Chain, Walden University, 2014	Adjunct Professor	EBTM 310
Case, Vera	Full-Time	JD, University of Maryland, 1993	Teaching Professor	BUSX 301, BUSX 460
Cavallaro, Angela	Full-Time	MS, Behavioral Science, Johns Hopkins University, 2002	Assistant Teaching Professor	BUSX 301
Chang, Hua	Full-Time	PhD, Marketing, Drexel University, 2014	Associate Professor	MKTG 341
Chapman, Graig	Part-time	MS, Mathematics, SUNY at Albany, 2017	Adjunct Professor	MATH 231
Charvat, Matthew	Part-Time	MS, Human Resource Development, Towson University, 2009	Adjunct Professor	MNGT 361
Cheng, Feng	Full-Time	PhD, Operations, Arizona State University, 2020	Assistant Professor	EBTM 350
Christensen, Finn	Full-Time	PhD, Economics, University of Minnesota, 2022	Assistant Professor	ECON 201
Cook, William	Full-Time	MBA, Loyola University, 1988	Associate Teaching Professor	EBTM 250, EBTM 251
Coriale, Kenneth	Full-Time	MA, Economics, University of Maryland, 2018	Assistant Teaching Professor	ECON 201
Crispell, Jacquelyn	Part-time	MS, Science Administration, Johns Hopkins University, 1990	Adjunct Professor	MATH 231
Cutrone, Joseph	Part-Time	PhD, Mathematics, Johns Hopkins University, 2011	Adjunct Professor	EBTM 250, MATH 231
Dalsimer, Kevin	Part-time	MS Math Education, Towson University, 2004	Adjunct Professor	MATH 211
Davis, Shymaine	Full-Time	MBA, Johns Hopkins University, 2001 (CPA)	Assistant Teaching Professor	ACCT 201
DeAlmeida, Robert	Part-Time	MS Economics, University of Baltimore, 1985	Adjunct Professor	BUSX 460
Delahanty, Kathryn	Full-Time	JD, University of Maryland, 1994	Teaching Professor	BUSX 301
DeMallie, Suzanne	Full-Time	MS, Teaching, Goucher College, 2011 (CPA)	Assistant Teaching Professor	FIN 331
Donnelly, Mark	Full-Time	MSF, Finance, Loyola University, 2008, CFP	Professor of Practice	FIN 331
Du, Lijing	Full-Time	PhD, Finance, University of Kansas, 2013	Professor	FIN 331
Dukes, Lawrence	Full-Time	MAS, Information Technology, Johns Hopkins University, 1982	Assistant Teaching Professor	MKTG 341

Faculty Name	Status (Full-Time, Part-Time, Adjunct)	Highest Degree Earned/ Field of Study/Institution/ Degree Award Date	Title/Rank	Courses Faculty Regularly Teach (Course Number)
Dutta, Koushikee	Full-time	PhD, Management and Entrepreneurship, Louisiana Tech University, 2021	Assistant Professor	MNGT 481
Ellison, Lori	Full-time	PhD, Business and Management, University of Maryland, 2009	Professor of Practice	MNGT 481
Essien, Shawn	Part-Time	JD, University of Baltimore, 1998	Adjunct Professor	LEGL 225
Estelle, Matthew	Full-time	M.A., Mathematics Education, Ohio State University, 2009	Assistant Teaching Professor	MATH 211
Fanelle, Brandon	Part-Time	BS, Business Administration, 2015 (CFP)	Adjunct Professor	BUSX 460
Fardanesh, Soheila	Full-Time	MA, Mathematical Economics, University of Colorado, 1982	Teaching Professor	ECON 205
Fernandez, Edward	Part-time	MS, Mathematics Education, Towson University, 2009	Adjunct Professor	MATH 231
Flores, Mark	Full-Time	MBA, University of Baltimore, 2013	Assistant Teaching Professor	BUSX 460, MNGT 361
Fluelling, Vanecia	Full-Time	PhD, Information Technology, Morgan State University, 2019	Professor of Practice	MKTG 341
Frye, Raquel	Full-Time	MS, Economics, Georgia State University, 2004	Associate Teaching Professor	ECON 201
Glushakow-Smith, Lily	Full-time	MS, Mathematics, Sam Houston State University, 2023	Assistant Teaching Professor	MATH 231
Goodyear, Bryan	Part-time	MS, Management Information Systems, University of Maryland Global Campus, 2019	Adjunct Professor	EBTM 337
Groves, Melissa	Full-Time	PhD, Economics, University of Massachusetts, 2000	Associate Professor	ECON 201
Haile, Redate	Part-Time	MS, Information System Technology, The George Washington University School of Business, 2019	Adjunct Professor	EBTM 343
Han, Chaodong	Full-Time	PhD, Logistics and Supply Chain Management, University of Maryland, 2009	Professor	EBTM 419
Hardy, William	Part-Time	MS Marketing/Finance, Northwestern, 2004	Adjunct Professor	MKTG 341
Hartnett, Ryan	Part-Time	MS, Business, University of Scranton, 2015	Adjunct Professor	MNGT 361
Hazra, Megharanji	Full-Time	MS, Economics, University of Calcutta, 2002	Associate Teaching Professor	ECON 201, ECON 202
Hogan, Elizabeth	Full-Time	MBA, Georgetown University, 2009	Assistant Teaching Professor	EBTM 250, EBTM 251
Hou, Xuezhang	Full-time	PhD Applied Mathematics, Oakland University, 2000	Professor	MATH 211
Huang, Jian	Full-Time	PhD, Finance, University of Kansas, 2013	Professor	FIN 331
Iotina, Gergana	Full-Time	JD, University of Baltimore, 2002	Clinical Assistant Professor	LEGL 225

Faculty Name	Status (Full-Time, Part-Time, Adjunct)	Highest Degree Earned/ Field of Study/Institution/ Degree Award Date	Title/Rank	Courses Faculty Regularly Teach (Course Number)
Ji, Justin	Full-Time	PhD, Management, University of Kansas, 2009	Associate Professor	MNGT 361
Johnson, Quincey	Full-Time	JD, University of Maryland, 1993	Teaching Professor	BUSX 301, LEGL 225
Jones, Bruce	Part-Time	MBA, University of Baltimore, 2007	Adjunct Professor	MNGT 361
Jung, Juergen	Full-Time	PhD, Economics, Indiana University, 2008	Professor	ECON 202
Khoshghadam, Leila	Full-Time	PhD, Marketing, Old Dominion University, 2020	Assistant Professor	MKTG 341
Kim, Eunice	Full-Time	PhD, Marketing, Yale University 2010	Assistant Professor	MKTG 341
King, Andrew	Part-Time	MBA, Loyola University, 2016	Adjunct Professor	MNGT 361
Knight, Stacy	Full-Time	MBA, Loyola University, 1995	Associate Teaching Professor	MKTG 341
Kulkarni, Gauri	Full-Time	PhD, University of Maryland, 2009	Associate Professor	MKTG 341
Kwon, Kyungeun	Full-Time	PhD, Accounting, Virginia Commonwealth University, 2022	Assistant Professor	ACCT 201
Leppo, Sam	Full-Time	MA, Economics, American University, 2000	Teaching Professor	ECON 202
Li, Jianan	Full-Time	PhD, Management, Nanjing University, 2017	Assistant Professor	MNGT 361
Li, Xiaolin	Full-Time	PhD, Management Systems, Kent State University, 2008	Professor	EBTM 446, EBTM 422
Litterello, David	Part-Time	MBA, New York Institute of Technology, 1992	Adjunct Professor	BUSX 460, MNGT 361
Liu, Yang	Full-Time	PhD, Economics, Rutgers University, 2024	Assistant Professor	ECON 201, ECON 202
Liu, Yanli	Full-Time	PhD, Economics, Northeastern University, 2024	Assistant Professor	ECON 201
Magnotta, Sarah	Full-Time	PhD, University of Kentucky, 2015	Associate Professor	MKTG 341
Manley, James	Full-Time	PhD, Economics, University of California Berkeley, 2008	Professor	ECON 205
Markowitz, Ivan	Part-time	MS, Electrical Engineering, University of Pennsylvania, 1969	Adjunct Professor	MATH 231
McComas, Heather	Part-Time	MS, Information Technology, Towson University, 2015	Adjunct Professor	BUSX 460
Mohamed, Mona	Full-Time	PhD, Management Information Technology, Towson University, 2018	Associate Professor	EBTM 455
Mohamed, Mona	Full-time	DSc, Information Technology, Towson University, 2018	Associate Professor	EBTM 337
Moyer, Todd	Full-time	EdD, Temple University, 2003	Professor	MATH 211
Nag, Barin	Full-Time	PhD, Management Science, University of Maryland, 1997	Professor	EBTM 337, EBTM 365, EBTM 456
Noyes, Donna	Full-time	MS Applied and Computational Mathematics, Johns Hopkins University, 2022	Assistant Teaching Professor	MATH 211

Faculty Name	Status (Full-Time, Part-Time, Adjunct)	Highest Degree Earned/ Field of Study/Institution/ Degree Award Date	Title/Rank	Courses Faculty Regularly Teach (Course Number)
O'Leary, Erica	Full-time	MS, Mathematics, Northwestern University, 2018	Assistant Teaching Professor	MATH 231
Otto, James	Full-Time	PhD, Management Information Systems, University of Kentucky, 1996	Professor	EBTM 400
Palmateer, Jason	Full-Time	MA, Economics, University of Iowa, 1994	Teaching Professor	ECON 205
Parolia, Neeraj	Full-time	PhD, Business Administration, Central Florida University, 2008	Associate Professor	EBTM 337
Pillutla, Sharma	Full-time	PhD, Operations Management, Syracuse University, 1993	Professor	EBTM 337
Prettyman, Alexa	Full-Time	PhD, Economics, Georgia State University, 2021	Assistant Professor	ECON 201
Pustovit, Aleksandra	Full-Time	PhD, Management, Rutgers University, 2019	Assistant Professor	MNGT 361
Rassipour, Rana	Full-Time	MS, Systems Engineering, The George Washington University School of Business, 2013	Associate Teaching Professor	EBTM 350, EBTM 454
Ray, Brian	Part-time	MS Mathematics, Towson University, 2008	Adjunct Professor	MATH 211
Rhoads, Thomas	Full-Time	PhD, Economics, University of Wyoming, 2000	Professor	ECON 202
Richardson, Joseph	Part-Time	MBA, Loyola University, 2003	Adjunct Professor	BUSX 460, MKTG 341
Riggs, Nina	Part-time	MS, Educational Leadership, Loyola University, 2015	Adjunct Professor	MATH 231
Rodman, John	Full-Time	MBA, Virginia Commonwealth University, 2001	Assistant Teaching Professor	MKTG 341
Russo, Charles	Full-Time	PhD, Accounting, Pennsylvania State University, 2002 (CPA)	Professor	ACCT 202
Sanford, Douglas	Full-Time	PhD, Management, University of Michigan, 1994	Professor	MNGT 361
Schiavone, Vincent	Part-Time	MS, Supply Chain Management, Towson University, 2020	Adjunct Professor	EBTM 350
Schiff, Andrew	Full-Time	PhD, Accounting, Rutgers University, 1993 (CPA)	Professor	ACCT 201
Schuldenfrei, Allen	Part-Time	MS Taxation, NYU School of Law, 1983 (CPA)	Adjunct Professor	ACCT 202
Schuller, Cameron	Part-Time	MS, Supply Chain Management, Towson University, 2016	Adjunct Professor	EBTM 365
Schumm, Kari	Full-time	MS, Operations Research, University of North Carolina, 2018	Associate Teaching Professor	MATH 231
Scott, Randolph	Part-Time	MS Accountancy, University of Phoenix, 2012 (CPA)	Adjunct Professor	ACCT 202
Seeberger, John	Full-Time	JD, University of Baltimore, 1987	Teaching Professor	LEGL 225
Sewell, Brent	Part-Time	MBA, University of Maryland, 2017	Adjunct Professor	EBTM 310, EBTM 360

Faculty Name	Status (Full-Time, Part-Time, Adjunct)	Highest Degree Earned/ Field of Study/Institution/ Degree Award Date	Title/Rank	Courses Faculty Regularly Teach (Course Number)
Seyed Abootorabi, Hooman	Full-time	PhD, Entrepreneurship, Syracuse University, 2022	Assistant Professor	MNGT 481
Shipley, William	Full-time	Ph.D., Mathematics Education, American University, 1999	Assistant Teaching Professor	MATH 211
Shrestha, Vinish	Full-Time	PhD, Economics, Emory University, 2015	Associate Professor	ECON 202
Shul, Linda	Part-Time	MS Marketing, University of New Mexico, 1993	Adjunct Professor	MKTG 341
Skudzinskas, Algis	Full-Time	EED, Gwyneed Mercy University, 2018	Assistant Teaching Professor	FIN 331
Smuckler, Neil	Part-Time	MS Financial Management, Johns Hopkins University, 1990 (CPA)	Adjunct Professor	ACCT 202
Steffes, Erin	Full-Time	PhD, Marketing, University of Texas Dallas, 2005	Professor	MKTG 341
Tchatie-Leudeu, Sandrine	Part-time	MS, Mathematics, Boston University, 2010	Adjunct Professor	MATH 231
Thacker, Christopher	Full-Time	MS, Professional Writing, Towson University, 2007	Professor of Practice	BUSX 301
Tomasi, Stella	Full-Time	PhD, Management Information Systems, Temple University, 2009	Professor	EBTM 320
Townsley, Ryan	Part-Time	MBA, University of Baltimore, 2016	Adjunct Professor	BUSX 460
Valle, Ralph	Part-Time	MS Professional Studies, Towson University, 1999	Adjunct Professor	MKTG 341
Wernecke, Charisse	Full-Time	PhD, Educational Leadership, 2015 (CPA)	Assistant Teaching Professor	ACCT 201
Wiglesworth, Miriam	Full-Time	DBA, Wilmington University, 2022 (CPA)	Professor of Practice	ACCT 202
Wilson, Lowell	Full-Time	JD, University of Baltimore, 1994	Assistant Teaching Professor	LEGL 225
Yao, Dong-Qing	Full-Time	PhD, Management Science, University of Wisconsin, 2001	Professor	EBTM 350, EBTM 365
Yates, Christine	Full-Time	MS, Professional Writing, Towson University, 2020	Assistant Teaching Professor	BUSX 301
Zhang, Alice	Full-Time	MBA, University of Toronto, 2000	Associate Teaching Professor	EBTM 365
Zhang, Shuwei	Full-Time	PhD, Economics, Auburn University, 2019	Assistant Professor	ECON 202
Zhang, Zheng	Full-time	PhD Mathematics, University of Cincinnati, 2021	Assistant Teaching Professor	MATH 211
Zhao, Yongchen	Full-Time	PhD, Economics, University of Albany, 2014	Professor	ECON 202
Zhu, Xiaorui	Full-Time	PhD, Business Analytics, University of Cincinnati, 2022	Assistant Professor	EBTM 350, EBTM 457
Ziegler, James	Part-Time	MS Finance, Loyola University, 2000 (CPA)	Adjunct Professor	ACCT 202

Faculty Name	Status (Full-Time, Part-Time, Adjunct)	Highest Degree Earned/ Field of Study/Institution/ Degree Award Date	Title/Rank	Courses Faculty Regularly Teach (Course Number)
Zuccaro, Joseph	Full-Time	MBA, University of Maryland, 1994	Assistant Teaching Professor	MNGT 361, MNGT 481

I.2 Ongoing pedagogy training for faculty.

The Faculty Academic Center of Excellence at Towson (FACET) is the faculty development center for Towson University. FACET's mission is to support an inclusive and collaborative faculty community and foster a culture of excellence in scholarship and teaching. FACET supports all campus faculty in their scholarship and teaching through a combination of programs, workshops, resources, funding, and communities of practice such as: Student Engagement, Emerging Technologies, Open Educational Resources, and High Impact Educational Practices. In collaboration with the TU Office of Technology Services, FACET also recommends, reviews, and provides programs to support advancement of faculty skills with Blackboard, TU's learning management system. FACET provides one-on-one or small group, virtual or face-to-face meetings with an instructional design team, who also perform course reviews. Faculty may attend open meetings as well as request consultation from FACET staff.

In addition, faculty are mentored by peers. All faculty are required to undergo periodic peer review which allows fellow faculty to mentor fellow faculty at all levels to improve pedagogy and make adjustments to changing student and curricular needs.

J. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment.

K.1 Assurance of physical facilities.

TU's existing physical facilities, infrastructure, and instructional equipment are sufficient to support the needs of the program. The College of Business & Economics maintains analytics-capable laboratories and software platforms used in current coursework.

K.2 Assurance of distance education.

Business analytics courses are primarily delivered in-person via traditional modes of face-to-face instruction. A limited number of courses may be offered online as a convenience for students. FACET offers training and certification programs for online and hybrid/blended instruction, Universal Design for Learning (UDL), and effective pedagogical approaches for enriching distance learning, including the Quality Matters Rubric. Students and faculty can enroll in training modules that provide instruction in university-sponsored distance learning technologies, including Blackboard, WebEx, Zoom, and Panopto. Technology support is available online, as well as via email, text, phone and on a walk-in basis at Student Computing Services and the Office of Technology Services.

K. Adequacy of Library Resources.

Resources available through TU's Cook Library are sufficient to meet the needs of students and faculty. The library houses an extensive collection of materials, including more than 500,000

print and electronic volumes. Cook Library also houses computer workstations with specialty software for data analysis, data visualization, and mapping.

In addition to Cook Library, faculty and students have access to materials through reciprocal agreements at nearby Baltimore institutions and across USM-affiliated institutions. Materials from other libraries across the country can be requested for loan through standard interlibrary loan (ILL) services. As part of this service, faculty and students have access to RAPID ILL, a service customary at high research activity institutions. The current turnaround time for article requests is typically less than 48 hours.

L. Adequacy of Financial Resources.

The proposed program will be implemented using existing institutional resources; no new or additional resources are required for implementation beyond what TU already provides to support delivery of the existing specialization. The number of students currently enrolled in the specialization was used as an estimate for the projected enrollment each year. This is a very conservative estimate as total enrollment in this in-demand specialization has grown rapidly since its inception and should continue to grow. It was assumed that 92% of students are full time based on internal data.[9]

Table L1: Resources

Resources Categories	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)
1. Reallocated Funds	**$0**	**$0**	**$0**	**$0**	**$0**
2. Tuition/Fee Revenue	**$1,536,786**	**$1,536,786**	**$1,536,786**	**$1,536,786**	**$1,536,786**
2.a Number of Full-time Students	121	121	121	121	121
2.a Annual Tuition Rate	$7,756	$7,756	$7,756	$7,756	$7,756
2.a Subtotal Tuition	$938,476	$938,476	$938,476	$938,476	$938,476
2.a Annual Fees	$4,430	$4,430	$4,430	$4,430	$4,430
2.a Subtotal Fees	$536,030	$536,030	$536,030	$536,030	$536,030
2.a Total Full-time Revenue of New Students	$1,474,506	$1,474,506	$1,474,506	$1,474,506	$1,474,506
2.b Number of Part-Time Students	10	10	10	10	10
2.b Credit Hour Tuition Rate	$332	$332	$332	$332	$332
2.b Annual Fees Per Credit Hour	$187	$187	$187	$187	$187
2.b Annual Credit Hours Per Student	12	12	12	12	12
2.b Subtotal Tuition	$39,840	$39,840	$39,840	$39,840	$39,840
2.b Subtotal Fees	$22,440	$22,440	$22,440	$22,440	$22,440
2.b Total Part Time Revenue	$62,280	$62,280	$62,280	$62,280	$62,280
3. Grants, Contracts & Other External Sources	**$0**	**$0**	**$0**	**$0**	**$0**
4. Other Sources	**$0**	**$0**	**$0**	**$0**	**$0**
TOTAL (Add 1-4)	**$1,536,786**	**$1,536,786**	**$1,536,786**	**$1,536,786**	**$1,536,786**

[9] https://www.towson.edu/ir/documents/f_hdct_car_coll_stat.pdf

Reallocated Funds
Funds currently used to support the specialization in Business Analytics will be used to support the major in Business Analytics. No new or reallocated funds are necessary.

Tuition and Fee Revenue
Current in-state tuition rates were used in the projection. This rate is conservative because it does not factor in potential tuition increases.

Grants and Contracts
Not applicable.

Other Sources
Not applicable.

Total Year - Additional Comments
Not applicable.

Table L2: Expenditures

Expenditure Categories	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)
1. Total Faculty Expenses (b + c below)	**$598,500**	**$598,500**	**$598,500**	**$598,500**	**$598,500**
a. #FTE	3.0	3.0	3.0	3.0	3.0
b. Total Salary	$450,000	$450,000	$450,000	$450,000	$450,000
c. Total Benefits	$148,500	$148,500	$148,500	$148,500	$148,500
2. Total Administrative Staff Expenses (b + c below)	**$37,674**	**$37,674**	**$37,674**	**$37,674**	**$37,674**
a. #FTE	0.5	0.5	0.5	0.5	0.5
b. Total Salary	$27,300	$27,300	$27,300	$27,300	$27,300
c. Total Benefits	$10,374	$10,374	$10,374	$10,374	$10,374
3. Total Support Staff Expenses (b + c below)	**$43,815**	**$43,815**	**$43,815**	**$43,815**	**$43,815**
a. #FTE	0.5	0.5	0.5	0.5	5.0
b. Total Salary	$31,750	$31,750	$31,750	$31,750	$31,750
c. Total Benefits	$12,065	$12,065	$12,065	$12,065	$12,065
4. Equipment	**$0**	**$0**	**$0**	**$0**	**$0**
5. Library	**$0**	**$0**	**$0**	**$0**	**$0**
6. New or Renovated Space	**$0**	**$0**	**$0**	**$0**	**$0**
7. Other Expenses	**$0**	**$0**	**$0**	**$0**	**$0**
TOTAL (Add 1-7)	**$679,989**	**$679,989**	**$679,989**	**$679,989**	**$679,989**

Faculty
It was estimated that the program could be supported by three full-time faculty members if they were solely assigned to teach in that program. The average faculty salary across the department was used to calculate the total faculty expenses. Neither the number of faculty needed nor the salary will change as a result of elevation of the specialization to a stand-alone major.

Administrative Staff
Currently, the Department of Business Analytics & Technology Management is supported by one full-time administrative assistant. As multiple programs are housed in this department, one half of one FTE was assigned to support the Business Analytics program. The amount of administrative support needed will not be affected by the change from specialization to major.

Support Staff
Currently, the Department of Business Analytics & Technology Management is supported by one full-time academic advisor. As multiple programs are housed in this department, one half of one FTE was assigned to support the Business Analytics program. The number of academic advisors will not increase as a result of elevation of the program to a stand-alone major.

Equipment
No additional equipment is necessary.

Library
No additional library resources are necessary.
New and/or Renovated Spaces
No additional spaces are necessary.

Other Expenses
Not applicable.

M. Adequacy of Provisions for Evaluation of Program.
M.1 Evaluation of the program.
The current specialization in Business Analytics is functionally equivalent to a stand-alone major and will require no new courses. Nevertheless, any future course development will follow the regular Towson University procedures for approval, first at the program and department level, through the College of Business and Economics curriculum committee, and finally the University Curriculum Committee.

The course approval process evaluates new courses for appropriate rigor, effective assessment and grading, and adherence of the course syllabus to best practices. Evaluation at the program level ensures course content accuracy and program alignment, while the college and university level reviews facilitate the production of quality course proposals.

Existing courses are evaluated through regular review by program faculty and by student evaluations. Faculty regularly review courses to determine if the course meets overall program objectives. Additionally, instructors are observed by peers on a routine basis, with more frequent observations if faculty are new to a course or the university. If a course review indicates concerns or problems with a course, faculty develop strategies for addressing problems. Student course evaluation takes place at the end of every semester. Using a tool developed by TU faculty that allows quantitative and qualitative feedback, students give

feedback on instructors (e.g., ability to communicate clearly; quality of student-instructor interaction; preparedness) and suggest improvements for a course.

Evaluation of faculty follows policies and procedures established by TU's policies for faculty annual merit review and for faculty reappointment, tenure, and promotion. These evaluations occur at the department, college, and university level. The main areas of evaluation include teaching, scholarship, and service. Tools used as part of the annual evaluation process include review of the individual's portfolio that includes, but is not limited to, the following:

- Evidence of scholarship (e.g., articles in scholarly journals; presentations at scholarly meetings).
- Service work.
- A synopsis of teaching related activities (e.g., courses taught; new instructional procedures; interdisciplinary, diversity, international, and technology-related projects).
- Review of course syllabi.
- Peer teaching observation reports.
- Quantitative and qualitative student evaluation of instruction.

The assessment of student learning outcomes is built into course assessments and data are collected annually. Course coordinators, with the support of the Department of Business Analytics & Technology Management's representative to the Assessment Committee and the Associate Dean, oversee the collection and analysis of data, and creation of action plans, as necessary.

M.2 Evaluation of program effectiveness.

The assessment of this program will be guided by TU's Office of Assessment, following established TU policies and procedures, including review of the program's assessment plan to ensure that learning outcomes remain appropriate, and that students are meeting expectations.

The program will work with TU entities such as the Office of the Provost, Enrollment Services, and Student Services to review data on a regular basis and improve the program when needed. Effectiveness will be assessed by student retention, progress toward degree completion, career outcomes for graduates, student and faculty satisfaction, cost-effectiveness, and other key performance indicators.

Additionally, the program will remain in scope of AACSB accreditation, which is reviewed through a rigorous evaluation process every six years. Accreditation from AACSB is the longest standing and most recognized form of specialized accreditation business programs can receive. TU is accredited by AACSB for both business administration and accounting, a distinction held by less than 2% of business schools worldwide.

TU also conducts a comprehensive evaluation of the program every seven years as part of the USM-mandated Periodic Review of Academic Programs process. The purpose of the review is to promote continuous program improvement and ensure that the needs of students are being met. Each program submits a final report to the USM Board of Regents, identifying strengths and areas for improvement, for review and approval.

N. Consistency with the State's Minority Student Achievement Goals.

With approximately 60% of students identifying as non-white,[10] TU is nearly as diverse as the state of Maryland. It is one of only a few universities in the country to have no achievement gap, meaning that underrepresented student groups achieve the same or better academic success as the entire student population. TU strives to foster a learning community that reflects the population of our campus, region, and state, and recognizes that our success is dependent on cultivating diverse perspectives and approaches.

Business analytics is a high-opportunity pathway with strong earnings potential, supporting TU's goals around access and student success. The stand-alone major will help underrepresented students access analytics careers in Maryland's growing industries.

O. Relationship to Low Productivity Programs Identified by the Commission.

Not applicable. The program is not related to any low-productivity program identified by the Commission.

P. Adequacy of Distance Education Programs.

Not applicable. The program will be delivered face-to-face at TU's main campus.

[10] https://www.towson.edu/ir/documents/fall2025_factsheet_final.pdf

Appendix A — Descriptions of Required Courses within the Business Analytics Program

ACCT 201 PRINCIPLES OF FINANCIAL ACCOUNTING (3)
Accounting and financial reporting concepts and the significance of financial accounting information in decision-making. Includes the effects of accounting events on business financial statements; planning and decision-making tools in the operating cycle; and the process of recording and communicating information.

ACCT 202 PRINCIPLES OF MANAGERIAL ACCOUNTING (3)
Managerial accounting concepts and the significance of accounting information for managerial decision-making. How managers use information to carry out three essential functions in an organization: to plan operations, to control activities, and to make managerial decisions. Prerequisite: ACCT 201 or ACCT 211 with grade equivalent of 2.00 or higher.

BUSX 301 BUSINESS COMMUNICATIONS (4)
Seminar designed to enable students to gain the written and oral communication skills needed in professional business situations and to develop and practice important skills for workplace success. Requires grade of C or better to fulfill Core requirement. Prerequisites: a grade of C (2.0) or higher in ENGL 102 or ENGL 190, or equivalent; ECON 202; junior/senior status. Core: Advanced Writing Seminar.

BUSX 460 PROFESSIONAL EXPERIENCE (3)
Application of business knowledge, skills, and attitudes (KSA's) through professional responsibilities in employment, internship, or comparable experience. Prerequisites: BUSX 301, senior major standing; enrollment is conditional pending internship approval.

EBTM 250 PROBLEM SOLVING IN BUSINESS I (1)
Focus on analytic and technology skills needed to utilize spreadsheets to solve business problems. Topics covered include: managing and sharing workbooks, custom formats and layouts, creating advanced formulas, and creating advanced chart elements. To earn a satisfactory grade, students are required to pass the Microsoft Office Specialist (MOS) Excel Core exam and earn a MOS certification. The course can be waived if students have already obtained the Microsoft Office Specialist Excel Expert level certification. Students can repeat the course if they fail to pass and the grade will be replaced. Graded S/U. Prerequisites: major or minor standing; sophomore or higher standing.

EBTM 251 PROBLEM SOLVING IN BUSINESS II (1)
Focus on analytic and technology skills needed to utilize spreadsheets to solve business problems. Topics covered include: work with data and information in data tables, visualize data with charts, predict outcomes, and what-if analysis. Prerequisites: EBTM 250 or Microsoft Expert Excel Certification; sophomore standing or higher; major or minor standing.

EBTM 310 INTRODUCTION TO ERP SYSTEMS (3)
Will provide a comprehensive understanding of Enterprise Resource Planning (ERP) systems and their role in organizations. Included are key business processes including procurement, fulfillment, production, warehouse management, and material planning. Processes will be discussed in terms of how they are executed and their impact on financial and managerial accounting. Covers knowledge and skills across different functional areas, including accounting, finance, operations management, sales and human capital through hands-on exercises using a major ERP system. Particular attention will be given to the integrated nature of business processes. Prerequisites: ACCT, BUAD, EBUS major, or BUAN minor; junior/senior standing.

EBTM 320 DATA VISUALIZATION AND DASHBOARDS (3)
Introduces business-driven and friendly tools such as Tableau to create visualizations using a hands-on approach. Explores how to select appropriate KPIs and apply visualization techniques to create dashboards to reduce information overload and help with decision making. Incorporates communication through storytelling. Includes data prepping, data analyzing, data modeling and dashboards. Covers data sources from different functional areas. Prerequisites: one of the following: ECON 205, MATH 231, MATH 237, PSYC 212, or SOCI 212; ACCT, BUAD, EBUS major, or BUAN minor; junior/senior standing.

EBTM 337 ENTERPRISE INFORMATION SYSTEMS (3)
Strategic, tactical, and operational applications of enterprise information systems, e-business, and enterprise use of social media. Topics include data and knowledge management and networked computing, future trends using intelligent systems, and important enterprise resource planning systems used to integrate functional areas within organizations, collaborating with external partners, and integrating stakeholders across the value chain. Students who have successfully completed MNGT 337 will not receive additional credit for EBTM 337. Prerequisites: EBTM 250 and EBTM 251 (may be taken concurrently); sophomore major standing.

EBTM 343 INTRODUCTION TO PROJECT MANAGEMENT (3)
Management of projects through planning, scheduling and controlling of organizational activities. Course includes project selection, scope development and management, cost estimation and budgeting, scheduling, staffing, resource allocation, task tracking, task sequencing, and control. Project management software will be used to support the course material. Students who have successfully completed EBTM 443 or MNGT 443 will not receive additional credit for EBTM 343. Prerequisites: sophomore standing or higher; major or minor standing.

EBTM 350 BUSINESS ANALYTICS (3)
Focuses on using standard business analytic models to summarize and analyze data, build models, and drive impact through quantitative decision-making. Explores methods to create and frame problems, use of descriptive and prescriptive analytics and using data to discover patterns and trends. Prerequisites: EBTM 251 and (ECON 205/MATH 231 or equivalent course); junior standing or higher; major or minor standing.

EBTM 365 PRINCIPLES OF OPERATIONS MANAGEMENT (3)
Strategies and techniques for service and manufacturing operations. A number of quantitative techniques are presented. Practical business applications and international competitiveness are stressed throughout the course. Students will use industry relevant software in the course. Students who have successfully completed MNGT 365 will not receive additional credit for EBTM 365. Prerequisites: (EBTM 251 or Computer Proficiency Exam) and (ECON 205 or MATH 231/MATH 233); major in ACCT, BUAD, CIS, EBUS, MATH, XBACI, XCIEB or XEBBA; junior/senior standing.

EBTM 400 APPLIED DATA ANALYTICS (3)
Gives students an understanding of the importance and applications of data analytics in organizations. Its focus is on the analytical and business process uses of BI. The course will provide a high-level overview of the technical infrastructure of applied data analytics, and will focus on the use of reporting and analysis tools used to extract information needed to address specific business questions and problems. Prerequisites: EBTM 350, junior/senior standing.

EBTM 419 SUPPLY-CHAIN MANAGEMENT (3)
Basic concepts and strategies adopted in SCM. Primary focus is to develop a good understanding of strategic, tactical and operational issues of SCM and become familiar with the integration of various SCM entities. A number of essential techniques of SCM are presented as supplementary materials. Topics include: transportation management and network design, e-procurement, uncertainty management, supply chain coordination & integration, value of information (sharing), global SCM, customer value and SCM, information technology/standards in SCM. Not open to students who have successfully completed MNGT 419. Prerequisites: EBTM 337 and EBTM 365; junior/senior major standing.

EBTM 422 CRM ANALYTICS (3)
Covers theories and applications of customer relationship management (CRM) and CRM analytics. Discusses three core types of CRM – strategic, operational and analytical CRM as well as the use of technology applications to support marketing, sales and service functions of the organization. Hands-on CRM analytics labs are included for students to learn a variety of CRM-based analytics skills, including dataset management, data query, report, and dashboard development and customization. Prerequisite: EBTM 251.

EBTM 446 BUSINESS INTELLIGENCE (3)
Classifications of business decision problems and methods of analysis to identify the best solutions using business records for business intelligence. Methods of managing large storage of business records and related information and the discovery of knowledge to support managerial decision making. Prerequisites: EBTM 337 or EBTM 320, junior/senior standing, major or minor standing.

EBTM 454 BUSINESS PROCESS MANAGEMENT (3)
Business Process Management concepts, architecture, and specifications, introduction to modeling/design tools used to design, optimize and automate business processes as well as

performance measuring approaches for evaluating business process performance. Students will have hands-on experience modeling processes and developing robotic process automation (RPA) solutions. Prerequisites: major standing, EBTM 337 / MNGT 337, EBTM 365 /MNGT 365, junior or senior standing.

EBTM 455 BUSINESS DATA WAREHOUSING (3)
Covers theories and applications of business data warehousing, including data warehousing principles, designs, implementation, ETL tools, and business big data technologies. Discusses topics pertaining to data warehouse design, data warehouses for enterprises, and applications of data warehousing using an Enterprise Resource Planning system. Prerequisite: EBTM 337.

EBTM 456 BUSINESS DECISION MODELING (3)
Introduces basic concepts, principles, methods, implementation techniques, and applications of decision modeling. Topics include theory of linear and integer programming, decision making under uncertainty, risk analysis, simulation, multi-criteria decision analysis and a variety of business applications with decision models. Software packages are introduced for hands-on exercises. Prerequisite: EBTM 251.

EBTM 457 DATA MINING FOR BUSINESS ANALYTICS (3)
Introduces basic concepts, principles, methods, implementation techniques, and applications of data mining. Topics include prediction and classification methods, logistic regression, discriminant analysis, association and pattern discovery, cluster analysis, time series forecasting, and text mining. A software package is introduced for hands-on exercises. Prerequisite: EBTM 350.

ECON 201 MICROECONOMIC PRINCIPLES (3)
Economic reasoning of individual choice in household and market decisions. Behavior of firms in competitive and noncompetitive markets, functioning of labor and capital markets, role of the entrepreneur and effects of government policies. Students who have successfully completed the honors version of this course (ECON 203) will not receive additional credit for this course. Core: Social & Behavioral Sciences.

ECON 202 MACROECONOMIC PRINCIPLES (3)
Inflation and unemployment--causes and remedies. Money and banking, government spending and taxation. International trade. Students who have successfully completed the honors version of this course (ECON 204) will not receive additional credit for this course. Core: Social & Behavioral Sciences.

ECON 205 STATISTICS FOR BUSINESS AND ECONOMICS I (3)
Analysis and presentation of business and economic data; descriptive statistics and statistical inference; measures of central tendency and variability; probability theory; estimation; testing of hypothesis; linear regression analysis. Students who have successfully completed ECON 301 will not receive additional credit for ECON 205. Prerequisite: qualifying score on Math Placement exam or MATH 100 (recommended) or MATH 102 or higher. Core: Mathematics.

FIN 331 PRINCIPLES OF FINANCIAL MANAGEMENT (3)
Introductory course designed to provide students with the fundamental concepts underlying the theory of finance. Financial markets, security valuation, analysis of financial condition, forecasting, working capital management, capital budgeting, cost of capital, leverage, optimal capital structure, dividend policy. Prerequisites: ACCT 201, ACCT 202, ECON 201, ECON 202 and (ECON 205 or MATH 231); junior/senior standing; major standing.

LEGL 225 LEGAL ENVIRONMENT OF BUSINESS (3)
Examines the nature and sources of law, the U.S. legal system with emphasis on court jurisdiction, procedure, constitutional law, torts, criminal law, and contracts in general and as they relate to business. Core: The United States as a Nation.

MATH 211 CALCULUS FOR APPLICATIONS (3)
Intended primarily for students in biology, business, economics, psychology and the social sciences. Elements of differential and integral calculus from an intuitive standpoint with emphasis on the use of calculus in the above fields. Exponential and logarithmic functions, partial derivatives included. Not open to mathematics majors or minors. Prerequisite: qualifying score on the Math Placement Test or MATH 115 (recommended) or MATH 119. Core: Mathematics.

MATH 231 BASIC STATISTICS (3)
A non-calculus based introduction to statistics with emphasis on applications. Topics include categorical and quantitative data collection through sampling and experimental design, data description and displays, confidence intervals and hypothesis tests for one- and two-samples, and matched-pairs design; normal and t-distributions; correlation and simple linear regression. Emphasis on interpretations of results throughout. Substantial use of a computer package as a learning and computational tool. Students who have successfully completed the honors version of this course (MATH 233) will not receive additional credit for this course. Prerequisite: qualifying score on Math Placement exam or MATH 100 (recommended) or MATH 102 or higher. Core: Mathematics.

MKTG 341 MARKETING AND CREATIVITY (3)
Provides an overview of the discipline of marketing and its importance in the global economy. In this course, students will learn how marketing strategies and tactics are used to create value for all stakeholders. Students will practice both critical and creative thinking and then utilize quantitative and qualitative analysis to solve real-world marketing problems. Prerequisite: sophomore major/minor standing.

MNGT 361 LEADERSHIP AND MANAGEMENT (3)
Experience how leadership impacts organizational culture, strategy, and performance. Topics include making strategic decisions; leading and motivating; building and managing teams; managing communication, conflict, and power dynamics; human resource management; entrepreneurship; international business. Prerequisite: sophomore/junior/senior major/minor standing.

MNGT 481 STRATEGIC MANAGEMENT (3)
Business Policy and Strategy Capstone. Develops strategic thinking skills that integrate and build on the concepts and practices from functional business courses. Students will practice in-depth analysis of industries and competitors, and work to understand how managers must develop and implement strategies that generate sustainable value for all stakeholders by positioning the organization successfully in its competitive environment. Features a signature CBE experiential Live Strategy Case Competition with corporate partners. Must be taken at TU. Prerequisite: BUSX 301; FIN 331, MKTG 341, MNGT 361 and either EBTM 337 or ACCT 300; major in ACCT, BUAD, or EBUS; senior standing.

Appendix B — Sample Four Year Plan

Freshman

TERM 1	UNITS	TERM 2	UNITS
ECON 201* (Core 6)	3	ECON 202*	3
Prerequisite for MATH 211 if necessary*	3	MATH 211*	3
Core 1 (waived for transfer students)	3	Core 2*	3
Core 4*	3	Core 10*	3
Core 5*	3	Elective*	3
	15		**15**

Sophomore

TERM 1	UNITS	TERM 2	UNITS
ACCT 201*	3	ACCT 202*	3
ECON 205 or MATH 231* (Core 3)	3	Core 8*	3
LEGL 225 (Core 11)*	3	Core 13*	3
Core 7*	4	Elective*	3
Core 12*	3	Elective*	3
	16		**15**

Junior

TERM 1	UNITS	TERM 2	UNITS
EBTM 250	1	FIN 331	3
EBTM 251	1	MNGT 361	3
MKTG 341	3	EBTM 350	3

BUSX 301 (Core 9)	4	EBTM 365	3
EBTM 337	3	EBTM 455	3
EBTM 320	3		
	15		**15**

Senior

TERM 1	**UNITS**	**TERM 2**	**UNITS**
MNGT 282 (Recommended Core 14)	3	BUSX 460	3
EBTM 446	3	MNGT 481	3
EBTM 456	3	EBTM 400	3
Business Analytics Elective	3	EBTM 457	3
Elective	3	Elective(s)	2
	15		**14**

Total Units 120

*May be transferred in from a Community College

Appendix C — Comparison to Other Universities

TU's specialization in Business Analytics is equivalent to a major

Towson University Business Analytics	**University of Maryland Operations Management and Business Analytics**[11]	**Loyola University Information Systems and Data Analytics**[12]
Interdisciplinary Business Courses (51 credits)	**Interdisciplinary Business Courses (45 credits)**	**Interdisciplinary Business Courses (36 credits)**
Microeconomic Principles	Principles of Microeconomics	Microeconomic Principles
Macroeconomic Principles	Principles of Macroeconomics	Macroeconomic Principles
Principles of Financial Accounting	Principles of Accounting I	Financial Accounting
Principles of Managerial Accounting	Principles of Accounting II	Managerial Accounting
Legal Environment of Business	Business Law I	Legal Environment of Business
Applied Calculus	Elementary Calculus I	Applied Calculus
Statistics	Business Statistics	Business Statistics
Problem Solving in Business I and II (Excel certification)		
Business Communication	Oral Communication: Principles and Practices or Critical Thinking and Speaking	
Professional Experience (Internship)	Career Search Strategies in Business	
Enterprise Information Systems	Introduction to Information Systems	Data Analytics and Information Systems
Principles of Financial Management	Business Finance	Financial Management
Leadership and Management	Managing People and Organizations	Management
Marketing and Creativity	Marketing Principles and Organization	Marketing
Principles of Operations Management	Introduction to the Business Value Chain	Supply Chain and Operations Management
Strategic Management	Strategic Management	
Business Analytics		
Business Analytics Specific Courses (21 credits)	**Operations Management and Business Analytics Specific Courses (18 credits)**	**Information Systems and Data Analytics Specific Courses (18 credits)**
Data Visualization and Dashboards		
Applied Data Analytics	Data Analytics	
Business Intelligence		Business Intelligence and Data Mining
Business Data Warehousing		Data Management and Database Systems
Business Decision Modeling	Data Modeling in Business	
Data Mining for Business Analytics		

[11] https://academiccatalog.umd.edu/undergraduate/colleges-schools/business/decision-operations-information-technologies/operations-management-business-analytics-major/

[12] https://www.loyola.edu/_media/department/academic-advising/documents/academic-worksheets/major-26/bba-information-systems-data-analytics-2026.doc

Towson University Business Analytics	**University of Maryland Operations Management and Business Analytics**[11]	**Loyola University Information Systems and Data Analytics**[12]
Business Analytics Elective	Two Operations and Analytic Electives	
	Quantitative Models for Management Decisions	
	Operations Analytics	
		Introduction to Programming in Python
		Cyber Security and Networks
		Web-Enabled Entrepreneurial Project
		Elective (Data Visualization or Artificial Intelligence)

Appendix D — Articulation Agreement

Umbrella Program Transfer Agreement
between Towson University and Cecil College

This **UMBRELLA PROGRAM TRANSFER AGREEMENT** (this "Agreement"), effective as of the date of last signature below (the "Effective Date"), is hereby entered into by and between **TOWSON UNIVERSITY** ("TU"), an educational institution of the University System of Maryland, itself an agency of the State of Maryland, located in Towson, Maryland, and **CECIL COLLEGE** ("Cecil"), a community college located in North East, Maryland.

I. Purpose

The Agreement affirms the commencement of an initiative between Cecil and TU (each, a "Party" and collectively hereinafter referred to as the "Parties") to provide articulated transfer pathways for Cecil students (each, a "Pathway") where, after successful completion of Cecil coursework, admissible Cecil students will be able to transfer seamlessly to TU and enroll in programs leading to the Bachelor of Science, Bachelor of Arts, Bachelor of Fine Arts, or Bachelor of Technical and Professional Studies degrees.

The purpose of this Agreement is to: (i) define the responsibilities of each Party and the opportunities for students who choose to follow a Pathway, and (ii) to enhance and facilitate degree completion at the respective institutions. In addition, this Agreement contributes to the Maryland Higher Education Commission's completion initiative by increasing associate degree attainment and providing momentum for baccalaureate completion.

II. Guaranteed Admission

Subject to the terms and conditions of this Agreement, TU shall provide students graduating from Cecil with associate degrees the opportunity to seamlessly transfer to TU into any of the bachelor's degree programs offered by TU that do not have special admissions requirements. TU's Office of Undergraduate Admission will retain the final authority in all admission decisions.

III. Pathways; Admission to Special Programs

Each Pathway connecting departments, majors, or tracks between Cecil or TU shall be established and memorialized pursuant to a separate Program Transfer Addendum ("PTA Addendum"), which shall be incorporated to this Agreement. A template for the PTA Addendum is attached hereto as Exhibit A.

The PTA Addendum shall specify the department, major, or track at Cecil sending students to TU, the department, major, or track at TU awarding transfer credit, and any other relevant information.

When applicable, the PTA Addendum will outline specific requirements for admission into TU's screened major. Students must follow the admission requirements and application processes for those screened majors as outlined in the TU Undergraduate Catalog.

IV. Acceptance of Transfer Credit

Subject to the terms and conditions of this Agreement, TU shall accept transfer of Cecil credits up to a maximum of sixty-four (64) applicable semester credit hours. PTA Addendums hereto include Pathways detailing the requirements for credit transfer for specific degree programs/curricula.

A completed General Education program taken as part of an associate's degree (e.g., AA, AS, ASE, AAT) at Cecil will transfer to TU's Core Curriculum without the need for a course-by-course match. Students who have completed an associate's degree will be required to take TU's Advanced Writing Seminar (Core 9) and additional units (which is the term TU uses when referencing credits/credit hours) necessary to complete the minimum number of Core Curriculum units. The Towson Seminar (Core 1) course will be waived for all students transferring under this Agreement. Official transcripts from all higher education institutions from which students have earned academic credit must be submitted to TU as part of the application process. Credits transferred into Cecil from other colleges/universities will be reviewed individually to determine transferability and applicability.

TU itself does not grant academic credit for occupational competency/life experience. However, such credits, including institutional examination credits, will be accepted if awarded by Cecil and documented on an official transcript. TU will also accept a maximum of 30 credits in any combination from one of more of the following sources: acceptable Advanced Placement (AP) examination scores, acceptable College Level Examination Program (CLEP) scores, Defense Activity for Non-Traditional Education Support (DANTES) exam credits, Cambridge Advanced International Certificate of Education Diploma, successful completion of International Baccalaureate (IB) examinations, or acceptable transfer credit for prior learning.

V. Academic Planning

To facilitate a seamless transition, Cecil students should work closely with their academic advisor at Cecil to develop a comprehensive academic plan as early in their academic career as possible and prior to transfer. Students and advisors are encouraged to utilize a variety of advising resources including the PTA Addendum (Exhibit A), Cecil Catalog, TU Undergraduate Catalog, respective departmental websites, and ARTSYS (the USM online articulation database), to ascertain the transferability of coursework.

Pre-transfer advising is also available at TU for students to discuss their progress in the Pathways before transferring to TU.

VI. Academic Advising

Before matriculation at TU, a student's official transfer credit evaluation will be available on the student portal's Academic Requirements Report. The Academic Requirements Report details prior coursework transferability and applicability to the university, Core Curriculum, and major requirements at TU.

All new TU students are required to attend the New Student Orientation. During this orientation, students will meet with their academic advisors to review prior coursework, discuss academic interests and goals, and register for the upcoming semester.

TU students are assigned advisors in their area of study and are encouraged to meet with them periodically to assess their academic progress. Students with forty-five (45) or more earned credits must meet with their academic advisors to complete individualized Degree Completion plans for completion of all Core Curriculum, graduation, and major requirements, as outlined in the TU Undergraduate Catalog. These requirements include successfully completing at least 120 credits/units to earn the baccalaureate degree, of which at least thirty (30) must be earned at TU.

VII. Financial Aid and Transfer Scholarships

The Free Application for Federal Student Aid (FAFSA) is required for need-based aid. Students transferring from Cecil to TU must indicate TU's school code of 002099 when submitting the FAFSA. All students are encouraged to submit the FAFSA beginning October 1 but no later than the priority application deadline of January 15.

Students transferring from Cecil to TU who meet the transfer admissions priority deadline will be considered for TU's merit-based scholarship, the Transfer Achievement Award, for outstanding academic achievement.

Cecil students who transfer to TU are encouraged to apply for other TU scholarship opportunities as they become available. Students should consult with the Scholarship Seeker on the financial aid site at TU. TU transfer scholarships shall be promoted on both the TU and Cecil websites.

Students transferring to from Cecil to TU who have completed an associate's degree are encouraged to apply for the Maryland Higher Education Commission (MHEC) 2+2 Transfer Scholarship.

VIII. Reverse Transfer

TU encourages students to complete their associate's degree at Cecil before transferring. Additionally, TU will support former Cecil students who have transferred to TU without completing their associate's degrees through the "Reverse Transfer" process. TU will facilitate reverse transfers each spring and fall semester, identifying students who meet the reverse transfer criteria and will notify Cecil of eligible students. Cecil will review to determine eligibility for awarding of the associate's degree at Cecil. Students must meet the following qualifying criteria to be considered for reverse transfer: (1) be a current student at TU; (2) have not received any degree from TU; and (3) have earned at least 15 credits at Cecil (based on what TU transferred in) and have at least 60 total earned credits. Eligible students must indicate their interest in participating in Reverse Transfer at the time of application to TU or sign a FERPA (defined below) waiver to allow TU and Cecil advisors to exchange student academic records. Reverse Transfer data will be shared yearly amongst administrators, as set forth below.

IX. Reports and Data Sharing

TU shall provide annual transfer reports to Cecil. Transfer reports will include data on Cecil transfer students who are currently enrolled at TU. Transfer reports should include: student demographics, number of credits transferred, program of study, scholarship awardees, number of conferred bachelor's degrees, number of Reverse Transfer students, and other pertinent information.

Cecil will provide student data and reports to TU annually, including student enrollment information, enrollment breakdown based on programs at Cecil, student demographic data, and other pertinent information.

The Parties will comply with all provisions of the Federal Family Educational Rights and Privacy Act ("FERPA") in all disclosures of FERPA-protected information between Cecil and TU. For example, the Parties may share personally identifiable information from a student's record for purposes related to a student's enrollment or transfer, per 34 C.F.R §§ 99.3 l (a)(2) and 99.34. In addition, pursuant to 34 C.F.R § 99.31 (a)(6)(i), the Parties may share with each other personally identifiable information from student's educational records without consent for the sole purpose of conducting studies to develop, validate, or administer predictive tests; administer student aid programs; or improve instruction. Also consistent with FERPA, the Parties shall use reasonable methods to assure that they provide only those education records necessary to this Agreement through secure delivery methods. Nothing in this Agreement shall be construed to allow the Parties to maintain, use, disclose, or share student record information in a manner prohibited under applicable laws or regulations.

X. Publicity, Promotion, and Intellectual Property

During the term of this Agreement, TU and Cecil shall develop and agree upon a mutually acceptable marketing and student recruitment plan to promote this Agreement and the Pathways to students. Any and all marketing, promotional, or publication materials developed pursuant to this Agreement that is prepared or developed by one Party must be reviewed and approved in writing by the other Party prior to the use of any such materials. Cecil agrees to promote Pathways to Cecil students by allowing TU to place marketing materials in student service-centered departments on campus and on the Cecil Transfer Agreements website.

Upon the request of TU, Cecil agrees to send outreach biannually (fall and spring) on behalf of TU to current Cecil students with 45 credits or more who are in articulated or parallel programs with TU.

Each Party reserves all rights to their respective trade names, trademarks, service marks, logos, or other commercial symbols (collectively, "Marks"), copyrights, patents, and other intellectual property rights and no rights to the Marks or copyrights, patent or other intellectual property rights are transferred or licensed pursuant to this Agreement. Each Party shall retain all intellectual property rights in their respective course materials offered to students while enrolled at their institution.

XI. Agreement Term and Review

The Agreement shall commence on the Effective Date and remain in force for an initial term of five (5) years unless sooner terminated by either Party as set forth below. The Agreement will automatically renew for an additional five (5) year term unless either Party gives ninety (90) days prior written notice to the other Party of its intent not to renew the Agreement.

Either Party may terminate this Agreement by providing ninety (90) days' written notice to the other Party. During the notice period, the Parties may discuss the continuation of a formal relationship. If the Agreement is terminated, TU will honor transfer students from Cecil under the expiring Agreement terms.

If there are changes in curriculum, programs, and credential requirements, the designated program administrators will meet on behalf of the Parties to determine if the Agreement should be amended. Any adjustments made during the Agreement's term will require a written amendment, modification, or addendum signed by authorized representatives of the Parties.

XII. Program Administrators

The individuals listed below have been designated to serve as program administrators of the Parties under this Agreement:

Cecil College Program Administrator	TU Program Administrator
Gladys Ramirez-Wrease, Ed.D. Associate Dean for Academic and Community Collaboration 443-674-1991 gramirezwrease@cecil.edu	Jennifer Mercer Associate Director University Admissions 410-704-6004 jmercer@towson.edu

If a Party replaces their respective program administrator for any reason, that Party shall promptly notify the other Party's program administrator in writing.

Any notice required to be given under this Agreement shall be given in writing and delivered: (1) in person with documentation of receipt; (2) by facsimile or via email of scanned document with documentation of delivery; or (3) by first class mail, postage prepaid and addressed to each Party's designated contact (program administrator), or such other person a Party may subsequently designate in writing as the program administrator. A notice shall be deemed effective when received.

XIII. Relationships of the Parties

Nothing contained in this Agreement shall be deemed or construed to create a relationship of employment, principal and agent, partnership, co- or joint employer, or joint venture. Neither Party shall, by virtue of this Agreement, have any right, power, or authority to act or create any obligation, express or implied, on behalf of the other Party, nor shall this Agreement be construed to create rights or obligations, express or implied, on behalf of or for the use of any parties other than the Parties hereto; and the Parties shall not be obligated, separately or jointly, to any third parties by virtue of this Agreement.

XIV. Waiver

Failure on the part of either Party, in any or more than one instance, to insist upon the performance of any of the terms, covenants, or conditions of this Agreement or to exercise any right or privilege contained within this Agreement, or the waiver by any Party of any breach of any of the terms, covenants, or conditions of this Agreement shall not be construed as thereafter waiving any such terms, covenants, conditions, rights or privileges, but the same shall continue and remain in full force and effect, as if no such forbearance of waiver had occurred.

XV. Governing Law

The Parties agree to comply with all federal, state, and local laws and regulations, and all Cecil and TU policies or procedures applicable to the activities under this Agreement. This Agreement, and all claims arising out of or relating to this Agreement, whether sounding in contract, tort, or otherwise, shall be governed in all respects by the laws of the State of Maryland, without reference to its conflicts of laws rules.

XVI. Counterparts

This Agreement may be executed in multiple counterparts, each of which is deemed an original and all of which constitute one and the same agreement. This Agreement is effective upon delivery of one executed counterpart from each Party to the other Parties, including by facsimile or PDF delivery. The signatures of all Parties need not appear on the same counterpart.

XVII. Severability

Each provision of this Agreement shall be deemed a separate, severable, and independently enforceable provision. The invalidity of breach of any provisions shall not cause the invalidity or breach of the remaining provisions hereof.

XVIII. Assignments

Neither Party may assign this Agreement nor assign any of its rights under this Agreement, except with the prior written consent of the other Party. Any purported assignment of rights in violation of this provision shall be void.

XIX. Non-Discrimination

Each party agrees to subscribe to the principle of equal opportunity and shall not discriminate on the basis of race, color, religion, creed, age, sex, gender identity, sexual orientation, genetic information, marital status, national origin, ancestry, physical or mental handicap, or any other protected class in the selection of students and any other actions taken pursuant to this Agreement.

XX. Force Majeure

Neither Party will be responsible for or liable to the other party for non-performance or delay in performance of any terms or conditions of this Agreement due to acts or occurrences beyond the reasonable control of the nonperforming or delayed Party. Such causes include but are not limited to, acts of God, acts of government, pandemics, epidemics, embargoes, terrorism, wars, riots, strikes or other labor disputes, shortages of labor or materials, hurricanes, fires, and floods, or any

other circumstances of like character. The Party whose performance is delayed or prevented shall promptly provide to the other Party written notice of the existence of and the reason for such nonperformance or delay and shall endeavor to mitigate its effects and make best efforts to resume performance as soon as practicable.

XXI. Entire Agreement and Amendments

Any exhibits, attachments, and documents referenced herein, whether physically attached hereto, are incorporated into and made part of this Agreement, which constitutes the final Agreement between the two Parties. It is the complete and exclusive expression of the Parties' agreement on the matters contained in this Agreement. All prior and contemporaneous negotiations and agreements between the Parties on the matters contained in this Agreement are expressly merged into and superseded by this Agreement. In entering this Agreement, neither Party has relied on any statement, representation, warranty, or agreement of the other Party except for those expressly contained in it. There are no conditions precedent to the effectiveness of this Agreement other than those expressly stated in this Agreement. No amendment, modification, or addition to this Agreement will be binding upon the Parties hereto unless reduced to writing and signed by the respective authorized representatives of each Party.

IN WITNESS WHEROF, the Parties hereby have caused this Agreement to be executed by their duly authorized representatives.

CECIL COLLEGE

By: _____

Dr. Christy Dryer
Vice President
Academic Programs

Date: 4/9/2024

TOWSON UNIVERSITY

By: _____

Dr. Melanie Perreault
Provost and Executive Vice President
for Academic Affairs

Date: 3/20/24

Exhibit A – Program Transfer Articulation Addendum Template

This Program Transfer Articulation Addendum (this "Addendum") effective as the date of the last signature below, is entered into pursuant to the Umbrella Program Transfer Agreement (the "Transfer Agreement") dated [DATE], by and between Anne Arundel Community College ("AACC") and Towson University ("TU" and collectively with AACC, the "Parties"), and is incorporated into the Transfer Agreement. Unless specifically modified in this Addendum, all terms and conditions in the Transfer Agreement shall remain in full force and effect. Should any conflict exist between the Transfer Agreement and this Addendum, the terms and conditions of the Transfer Agreement shall prevail.

This Addendum establishes an articulated transfer pathway(s) ("Pathway(s)") in which students from the [*insert name(s) of selected AACC department(s), major(s), or track(s)*] at AACC may seamlessly transfer into the [*insert name(s) of selected TU department(s), major(s), or track(s)*] at TU. For each degree program listed, a 2+2 Articulation Agreement shall be attached to this Addendum hereto and incorporated herein detailing the course equivalencies, general education, and major requirements, as well as any special admission and other additional requirements, necessary for AACC students to transfer into the aforementioned [*insert name of selected TU department, major, or track*] at TU and successfully complete a bachelor's degree.

For the Pathway(s) included in this Addendum, both Parties agree that faculty representatives from both institutions will meet regularly to engage in ongoing discussion to enhance and strengthen this collaboration and agree to update the Pathway(s) and/or associated 2+2 Articulation Agreement(s) whenever substantive changes in the degree programs listed occur at either AACC or TU.

IN WITNESS WHEROF, the Parties hereby have caused this Addendum to be executed by their duly authorized representatives.

CECIL COLLEGE

By: _____
Dr. Christy Dryer
Vice President
Academic Programs

Date: _____

TOWSON UNIVERSITY

By: _____
Dr. Melanie Perreault
Provost and Executive Vice President
for Academic Affairs

Date: _____

Program Transfer Articulation Addendum
TU College of Business & Economics: Multiple Majors

This Program Transfer Articulation Addendum (this "Addendum") effective as the date of the last signature below, is entered into pursuant to the Umbrella Program Transfer Agreement (the "Transfer Agreement") dated April 2, 2024, by and between Cecil College ("CC") and Towson University ("TU" and collectively with CC, the "Parties"), and is incorporated into the Transfer Agreement. Unless specifically modified in this Addendum, all terms and conditions in the Transfer Agreement shall remain in full force and effect. Should any conflict exist between the Transfer Agreement and this Addendum, the terms and conditions of the Transfer Agreement shall prevail.

This Addendum establishes an articulated transfer pathway ("Pathway") in which students from the Associate of Arts degree program in Business Administration Transfer may seamlessly transfer into the Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) TU College of Business & Economics majors (subject to the Maryland Higher Education Commission approving these degree programs) in the following majors:

- Business Economics
- Business Analytics
- Finance
- Project Management
- Financial Planning
- Marketing

For each degree program listed, a 2+2 Articulation Agreement shall be attached to this Addendum hereto and incorporated herein detailing the course equivalencies, general education, and major requirements, as well as any special admission and other additional requirements, necessary for CC students to transfer into the aforementioned College of Business & Economics majors at TU and successfully complete a bachelor's degree.

For the Pathway included in this Addendum, both Parties agree that faculty representatives from both institutions will meet regularly to engage in ongoing discussion to enhance and strengthen this collaboration, and agree to update the Pathway and/or associated 2+2 Articulation Agreements whenever substantive changes in the degree programs listed occur at either CC or TU.

[Signature on next page]

IN WITNESS WHEROF, the Parties hereby have caused this Addendum to be executed by their duly authorized representatives.

CECIL COLLEGE

By: _____
Dr. Christy Dryer
Vice President for Academic Affairs
and Provost

Date: 2/10/2026

TOWSON UNIVERSITY

By: _____
Dr. Melanie Perreault
Provost and Executive Vice President
for Academic Affairs

Date: 2/17/26

PROGRAM TRANSFER GUIDE

CECIL COLLEGE

TOWSON UNIVERSITY

This transfer guide is intended for students pursuing an Associate Degree in Business Administration Transfer at Cecil College who are interested in pursuing a Bachelor of Science in Business Analytics at Towson University. This transfer guide outlines the courses and program requirements a student should follow to satisfy degree requirements at Cecil College in order to complete both the Cecil College and TU degrees within a total of 4 years and 120 credits.

Associate Degree in Business Administration Transfer

Bachelor of Science in Business Analytics

Effective Term: Fall 2026

YEAR 1 - Cecil College

Fall	TU Equivalent	Credits	Spring	TU Equivalent	Credits
EGL 101 - College Composition (E) * ©	ENGL 102	3	MAT 127 - Introduction to Statistics (M) * ©	MATH 231	4
BUS 103 - Introduction to Business	USEL TLL	3	ECO 221 - Economics-Micro SS) * ©	ECON 201	3
ACC 101 - Accounting I *	ACCT 201	3	ACC 102 - Accounting II *	ACCT 202	3
CIS 101 - Introduction to Computer Concepts (I) ©	COSC 111	3	EGL 102 - Composition & Literature (H) ©	ENGL TLL	3
PSY 101 - Introduction to Psychology (SS) ©	PSYC 101	3	SPH 121 - Interpersonal Communications (H) © OR	COMM 215	3
			SPH 141 - Public Speaking (H) ◆ ©	COMM 131	
TOTAL CREDITS:		15	TOTAL CREDITS:		16

YEAR 2 - Cecil College

Fall	TU Equivalent	Credits	Spring	TU Equivalent	Credits
ECO 222 - Economics-Macro (SS) * ©	ECON 202	3	BUS 187 - Business Ethics *	PHIL T71	3
MAT 125 - Applied Calculus (M) *	MATH 211	4	BUS 210 - Business Law *	LEGL 225	3
BIO 130/BIO 131 - Princ of Biology I Lecture & Lab (S) ©	BIOL 200/200L	4	BIO 101 - General Biology Lecture (S) ©	BIOL 120	3
EGL 210 - Topics in World Literature (H) ◆	ENGL TLL	3	HST 110 - World History I (H) ©	HIST 160	3
			SOC 101 - Introduction to Sociology (SS) ◆ ©	SOCI 101	3
TOTAL CREDITS:		14	TOTAL CREDITS:		15

YEAR 3 - Towson University

Fall	Credits	Spring	Credits
BUSX 301 - Business Communications (Core 9) * ©	4	EBTM 251 -Problem Solving in Business II *	1
EBTM 250 - Problem Solving in Business I *	1	EBTM 337 - Enterprise Information Systems *	3
EBTM 320 - Data Visualization and Dashboards *	3	EBTM 350 - Business Analytics *	3
MKTG 341 - Principles of Marketing *	3	FIN 331 - Principles of Financial Management *	3
MNGT 361 - Leadership and Management *	3	Business Analytics Track Elective *	3
		General Elective (If needed)	3
TOTAL CREDITS:	14	TOTAL CREDITS:	16

YEAR 4 - Towson University

Fall	Credits	Spring	Credits
BUSX 460 - Professional Experience *	3	EBTM 400 - Applied Data Analytics *	3
EBTM 365 - Principles of Operations Management *	3	EBTM 457 - Data Mining for Business Analytics *	3
EBTM 446 - Business Intelligence *	3	MNGT 481 - Strategic Management *	3
EBTM 455 - Business Data Warehousing *	3	General Elective (If needed)	6
EBTM 456 - Business Decision Modeling *	3		
TOTAL CREDITS:	15	TOTAL CREDITS:	15

** Denotes course that must be completed with a grade of C or better ** Must consult with a TU Academic Advisor © Core Curriculum*

Notes & Recommendations from Towson University:

*Consult the latest version of the TU catalog for specific information on degree requirements/GPA requirements/repeat policy.
*Core 1 at TU is automatically waived for all transfer students.
*Courses with the ◆ symbol are recommended, but not required to complete the 4-year degree program. Consult your advisor for alternate course options.
*Course equivalents ending in TLL are general lower-level elective coursework at TU.
*T and F codes are lower-level versions of upper level courses at receiving institution. They do not count towards the upper level requirement for graduation.

Bachelor's degree requirements for all students:

- A cumulative grade point average (GPA) of 2.0 is required.
- A C grade (2.0 GPA) or higher is required for all major courses and prerequisites.
- 32 credits of the bachelor's degree must be completed at the upper level (courses numbered 300 or above) at TU